

**GREENBLUM & BERNSTEIN, P.L.C.**  
**Intellectual Property Causes**  
**1950 Roland Clarke Place**  
**Reston, VA 20191**  
**(703) 716-1191**

Attorney Docket No. P24575

In re application of: Thomas Thoroe SCHERB et al

Application No. : 10/743, 461

**Mail Stop Amendment**  
 Group Art Unit: 8138

Filed : December 23, 2003

Examiner: E. Hug

For : **MACHINE AND METHOD FOR THE MANUFACTURE OF A FIBER MATERIAL WEB**

Commissioner for Patents  
 U.S. Patent and Trademark Office  
 Customer Service Window, Mail Stop **Appeal Brief**  
 Randolph Building  
 401 Dulany Street  
 Alexandria, VA 22314  
 Sir:

Transmitted herewith is an **Appeal Brief 37 C.F.R. 1.111** in the above-captioned application.

- ☐ Small Entity Status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a previously filed statement.
- ☐ A verified statement to establish small entity status under 37 C.F.R. 1.9 and 1.27 is enclosed.
- ☐ An Information Disclosure Statement, PTO Form 1449, and references cited.
- ☐ A Request for Extension of Time.
- ☐ No additional fee is required.
- ☒ **An Appeal Brief under 37 C.F.R. § 41.37.**

The fee has been calculated as shown below:

Claims After Amendment	No. Claims Previously Paid For	Present Extra	Small Entity		Other Than A Small Entity	
			Rate	Fee	Rate	Fee
Total Claims: 33	*33	0	x25=	\$	x 50=	\$0.00
Indep. Claims: 1	**3	0	x100=	\$	x200=	\$0.00
Multiple Dependent Claims Presented			+180=	\$	+360=	\$0.00
Extension Fees for ___ Month(s)				\$		\$0.00
Appeal Brief						\$500.00
Total:				\$	Total:	\$500.00

\* If less than 20, write 20

\*\* If less than 3, write 3

☐ Please charge my Deposit Account No. 19-0089 in the amount of \$\_\_\_\_\_.

☒ A check in the amount of \$500.00 to cover the filing fee is included.

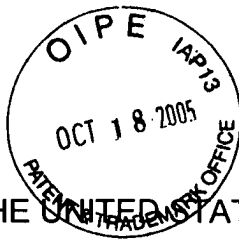
☒ The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 19-0089.

☒ Any additional filing fees required under 37 C.F.R. 1.16.

☒ Any patent application processing fees under 37 C.F.R. 1.17, including any required extension of time fees in any concurrent or future reply requiring a petition for extension of time for its timely submission (37 C.F.R. 1.136(a)(3)).

Neil F. Greenblum  
 Reg. No 28, 394

Robert W. Mueller  
 Reg. No. 35,043



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants : Thomas Thoroe SCHERB et al. Confirmation No.: 8138  
Appln. No. : 10/743,461 Group Art Unit: 1731  
Filed : December 23, 2003 Examiner: Eric J. Hug  
For : MACHINE AND METHOD FOR THE MANUFACTURE OF A  
FIBER MATERIAL WEB

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Window, Mail Stop **Appeal Brief**  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir:

This appeal is from the Examiner's final rejection of claims 1 – 33 as set forth in the Final Office Action of April 18, 2005.

A Notice of Appeal in response to the April 18, 2005 Final Office Action was filed August 18, 2005 along with a one-month extension of time. Further, the instant Appeal Brief is being timely submitted by the initial due date of October 18, 2005.

Appellant authorizes the charging of the requisite fee under 37 C.F.R. 1.17(c) in the amount of \$ 500.00 for the filing of the Appeal Brief, as well as any other fees necessary to ensure consideration of the instant Appeal Brief, to Deposit Account No. 19 - 0089.

10/19/2005 JADD01 00000072 10743461

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**(1) REAL PARTY IN INTEREST**

The real party in interest is Voith Sulzer Papiertechnik Patent GmbH, Sankt Pöltener Strasse 43, D-89522 Heidenheim, Germany by an assignment recorded on February 17, 2000 at Reel 010610 and Frame 0911, in U.S. Patent Application No. 09/471,369, of which the instant application is a Continuation.

**(2) RELATED APPEALS AND INTERFERENCES**

No related appeals and/or interferences are pending. However, a decision on Appeal No. 2003-1161 was rendered in U.S. Patent Application No. 09/471,369, of which the instant application is a Continuation, on October 23, 2003 affirming the Examiner's final rejection.

**(3) STATUS OF THE CLAIMS**

Claims 1–33 are the only claims pending in the instant application, and stand finally rejected.

**(4) STATUS OF THE AMENDMENTS**

No amendments have been entered subsequent to the Final Office Action of April 18, 2005.

**(5) SUMMARY OF CLAIMED SUBJECT MATTER**

The instant invention is directed to invention relates to a machine for the manufacture of a fiber material web, in particular a tissue paper or hygienic paper web, having at least one pressing gap (nip) which is formed between a shoe pressing unit and a drying or tissue cylinder, and a water absorbent carrier band, a water-impermeable pressing band and the fiber material web guided through the at least one gap. (Specification page 1, para. [0002]).

The machine includes a shoe pressing unit, and a cylinder comprising a Yankee drying cylinder. The shoe pressing unit and the cylinder are arranged to form at least one press nip. A water absorbent carrier band and a water-impermeable pressing band are provided such that the water absorbent carrier band and the water-impermeable pressing band are guided through the at least one press nip, and the fiber material web is adapted to pass through the at least one press nip with the water absorbent carrier band and the water-impermeable pressing band. (Specification page 9, para. [0041]). The at least one press nip has a length in a web travel direction greater than approximately 80 mm. A pressure profile which results over the press nip length has a maximum pressing pressure which is less than or equal to approximately 2 MPa. (Specification page 10, para. [0045]). Further, the shoe press unit, the cylinder, the water absorbent carrier band and the water-impermeable pressing band form the fiber material web to include one of a tissue paper and a hygienic paper web. (Specification page 9, para. [0041] to page 10, para. [0044]).

The following descriptions are made with respect to the independent claims and include references to particular parts of the specification. As such, the following are

merely exemplary and are not a surrender of other aspects of the present invention that are also enabled by the present specification and that are directed to equivalent structures or methods within the scope of the claims.

Independent claim 1 is directed to a machine including a shoe pressing unit 14, and a cylinder 16 comprising a Yankee drying cylinder. (Specification page 15, para. [0081] to page 16, para. [0085]). The shoe pressing unit 14 and the cylinder 16 are arranged to form at least one press nip 12. (Specification page 15, para. [0081]). A water absorbent carrier band 18 and a water-impermeable pressing band 20 are provided such that the water absorbent carrier band 18 and the water-impermeable pressing band 20 are guided through the at least one press nip 12, and the fiber material web 1 is adapted to pass through the at least one press nip 12 with the water absorbent carrier band 18 and the water-impermeable pressing band 20. (Specification page 12, para. [0062] and page 15, para. [0081] to [0085]). The at least one press nip 12 has a length in a web travel direction greater than approximately 80 mm. (Specification page 17, para. [0092]). A pressure profile which results over the press nip length has a maximum pressing pressure which is less than or equal to approximately 2 MPa. (Specification page 17, para. [0092]). Further, the shoe press unit 14, the cylinder 16, the water absorbent carrier band 18 and the water-impermeable pressing band 20 form the fiber material web 1 to include one of a tissue paper and a hygienic paper web. (Specification page 12, para. [0062] and page 15, para. [0080] to [0085]).



**(6) GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

(A) Claims 1 – 4, 7 – 21 and 24 – 32 are Rejected Under 35 U.S.C. § 102(e) as Anticipated by EDWARDS (U.S. 6,248,210);

(B) Claims 5 and 6 are Rejected Under 35 U.S.C. § 103(a) as Unpatentable over EDWARDS in view of LAAPOTTI (U.S. 5,043,046);

(C) Claims 22 and 23 are Rejected Under 35 U.S.C. § 103(a) as Unpatentable over EDWARDS in view of Bluhm *et al.* (U.S. 5,556,511) and Tapio *et al.* (U.S. 4,139,410);

(D) Claim 33 is Rejected Under 35 U.S.C. § 103(a) as Unpatentable over EDWARDS in view of SAUER (U.S. 5,019,211).

**(7) ARGUMENT**

**(A) The Rejection of Claims 1 – 4, 7 – 21 and 24 – 32 Under 35 U.S.C. § 102(e) as Anticipated by EDWARDS is in Error, the Rejection Should be Reversed, and the Application Should be Remanded to the Examiner.**

The Examiner asserts that EDWARDS discloses a process for pressing and dewatering a fibrous web, in which a nip pressure profile is optimized on a shoe press on a Yankee cylinder. The Examiner asserts that EDWARDS discloses a process for pressing and dewatering a fibrous web, in which a nip pressure profile is optimized on a shoe press on a Yankee cylinder. See page 2 of the Final Office Action dated April 18, 2005. However, the Examiner admits that EDWARDS discloses the “typical shoe press” as a comparative example in Figure 3 and is considered by EDWARDS to be ill-suited for low weight absorbent papers. See page 6 of the Final Office Action under the Response to Arguments section. The Examiner asserts that Figure 3 shows a shoe press length of 50 mm (with peak pressure of 4,500 kN/m<sup>2</sup> (4.5 MPa)) – 120 mm (with peak pressure of 1,500 kN/m<sup>2</sup> (1.5 MPa)), and that Figure 12 shows line load data for these shoes ranging from 87.5 kN/m – 250 kN/m. The Examiner further asserts that the pressure gradients impart no apparent structural limitations and thus EDWARDS is indistinguishable from the claimed invention. Appellants traverse the Examiner’s assertions.

Appellants’ independent claim 1 recites, in part, *inter alia*,

“...a shoe pressing unit and a Yankee drying cylinder arranged to form at least one press nip having a length in a web travel direction greater than approximately 80 mm, and having a pressure profile which results over the press nip length with a maximum pressing pressure which is less than or equal to approximately 2 MPa...”

Appellants submit that EDWARDS fails to anticipate at least the above-noted combination of features.

As noted above, the Examiner has acknowledged that EDWARDS considers the “typical shoe press” to be ill-suited for use in the disclosed method and apparatus. Thus, Appellants respectfully submit EDWARDS expressly teaches against using the conventional shoe press arrangement with a Yankee dryer, in particular, EDWARDS discloses in part:

“...since the press nip for low weight tissue and towel grades is pressure controlled, the very low peak pressure could cause a decrease in post press dryness, ultimately causing a loss in production. The counter roll in a conventional shoe press is smaller by comparison to the diameter of a Yankee dryer. As a result, the use of a conventional shoe shape would make it very difficult to remove the felt/fabric from the sheet at the nip exit. Therefore, conventional shoes shapes and conventional felt/fabric takeoff angles would exacerbate rewet for low weight absorbent products.”

See Column 5, lines 55 – 65.

Because EDWARDS admits a typical shoe press is not appropriately suited for use in the manner asserted by the Examiner in the pending rejection, Appellants submit that EDWARDS is non-enabling for the use of a conventional shoe press on a Yankee dryer, and therefore, cannot anticipate the instant invention under 35 U.S.C. § 102 (e).

Again, Appellants note that EDWARDS expressly teaches against using the typical press shoe in the disclosed apparatus, such that the recited combination of features are not taught in a single embodiment by EDWARDS. Thus, Appellants submit that this document fails to expressly or impliedly disclose a single embodiment that includes the combination of features recited in at least independent claim 1.

Moreover, it is apparent the Examiner’s assertions about EDWARDS, i.e.,

“...it is submitted that Edwards discloses the claimed press shoe length, peak pressure, and line load, all in this comparative example...”

are improper and should be withdrawn. See page 6, last full paragraph of the Final Office Action. Nothing in EDWARDS discloses the recited features as recited in independent claim 1, such as, *inter alia*, the nip size and pressing pressure. In fact, as noted above, EDWARDS expressly discloses not to use a conventional shoe press with a Yankee dryer (where an example of a conventional shoe press not suited for use with a Yankee dryer has a length of 120 mm with a maximum pressure of 1,700 kN/m<sup>2</sup>). Thus, EDWARDS expressly discloses *not* to structure and arrange the elements of a machine in the manner recited in the pending claims. Further, EDWARDS is directed to a press in which the minimum pressure is greater than 2,000 kN/m<sup>2</sup>, which is contrary to the expressly recited features of the claims.

Furthermore, while the Examiner asserts that the pressure gradients impart no apparent structural limitations (see page 4, second full paragraph and page 7 first full paragraph of the Final Office Action), Appellants again assert that the particular pressures recited in the claims are directed to the structural make-up of the claimed “machine” and, therefore, must be considered by the Examiner in properly examining the claims. Thus, Appellants submit that each and every claim recitation should be considered and not singularly disregarded, as the Examiner has done. Further, Appellants submit that the exerting of the pressure results from an arrangement of the elements recited in the claims, such that the arrangement of elements is not merely an intended use, but a positive arrangement of elements requiring consideration by the Examiner.

Further, as EDWARDS expressly discloses that the typical shoe press would not produce the steep, sharp pressure gradient required by the EDWARDS process and apparatus, such that EDWARDS further expressly teaches against the use of a “conventional” press shoe, such that no single embodiment of EDWARDS anticipates at least the independent claim.

Further, Appellants note that claims 2 – 4, 7 – 21 and 24 – 32 are likewise allowable as these claims depend from an allowable base claim, and because these claims recite additional subject matter that further defines Appellant’s invention.

Claim 2:

Appellants submit that claim 2 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the press nip length less than 200 mm, as recited in claim 2.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 2 is improper and should be withdrawn.

Claim 3:

Appellants submit that claim 3 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of

EDWARDS fail to disclose the subject matter of the independent claim, along with the press nip length at most 150 mm, as recited in claim 3.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 3 is improper and should be withdrawn.

Claim 4:

Appellants submit that claim 4 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the maximum line force produced in the press nip is between approximately 90 and approximately 110 kN/m, as recited in claim 4.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 4 is improper and should be withdrawn.

Claim 7:

Appellants submit that claim 7 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the

pressure profile which results over the press nip length is asymmetrical, as recited in claim 7.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 7 is improper and should be withdrawn.

Claim 8:

Appellants submit that claim 8 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the maximum pressing pressure is exerted in a rear quarter of the press nip length with regard to the web travel direction, as recited in claim 8.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 8 is improper and should be withdrawn.

Claim 9:

Appellants submit that claim 9 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with for a practically new carrier band, an average pressure rise gradient in a section of the

pressure profile which extends from a beginning of the press nip up to the maximum pressing pressure is greater than or equal to approximately 40 kPa/mm, as recited in claim 9.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 9 is improper and should be withdrawn.

Claim 10:

Appellants submit that claim 10 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the average pressure rise gradient in the section is greater than or equal to approximately 60 kPa/ mm, as recited in claim 10.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 10 is improper and should be withdrawn.

Claim 11:

Appellants submit that claim 11 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim,



along with the average pressure rise gradient in the section is greater than or equal to approximately 120 kPa/mm, as recited in claim 11.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 11 is improper and should be withdrawn.

Claim 12:

Appellants submit that claim 12 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with in a practically new carrier band, an average pressure drop gradient in an end region of the pressure profile is greater than or equal to approximately 300 kPa/mm, as recited in claim 12.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 12 is improper and should be withdrawn.

Claim 13:

Appellants submit that claim 13 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim,

along with the average pressure drop gradient in the end region is greater than or equal to approximately 500 kPa/mm, as recited in claim 13.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 13 is improper and should be withdrawn.

Claim 14:

Appellants submit that claim 14 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the average pressure drop gradient in the end region is greater than or equal to approximately 800 kPa/mm, as recited in claim 14.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 14 is improper and should be withdrawn.

Claim 15:

Appellants submit that claim 15 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim,

along with the average pressure drop gradient in the end region is greater than or equal to approximately 960 kPa/mm, as recited in claim 15.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 15 is improper and should be withdrawn.

Claim 16:

Appellants submit that claim 16 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with in the at least one press nip, the water absorbent carrier band is positioned between the water-impermeable pressing band and the fiber material web, as recited in claim 16.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 16 is improper and should be withdrawn.

Claim 17:

Appellants submit that claim 17 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim,

along with the fiber material web is adapted to contact the cylinder, as recited in claim 17.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 17 is improper and should be withdrawn.

Claim 18:

Appellants submit that claim 18 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the water absorbent carrier band comprises a felt, as recited in claim 18.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 18 is improper and should be withdrawn.

Claim 19:

Appellants submit that claim 19 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the water absorbent carrier band is constituted differently in a thickness direction, as recited in claim 19.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 19 is improper and should be withdrawn.

Claim 20:

Appellants submit that claim 20 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with a side of the water absorbent carrier band adapted to face the fiber material web has a finer structure than a side of the water absorbent carrier band adapted to face away from the fiber material web, as recited in claim 20.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 20 is improper and should be withdrawn.

Claim 21:

Appellants submit that claim 21 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the water-impermeable pressing band has a surface which is at least one of smooth, grooved and blind bored, as recited in claim 21.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 21 is improper and should be withdrawn.

**Claim 24:**

Appellants submit that claim 24 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with an additional press nip arranged ahead of the cylinder relative to the web travel direction, as recited in claim 24.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 24 is improper and should be withdrawn.

**Claim 25:**

Appellants submit that claim 25 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with at least one suction device, wherein ahead of the cylinder, relative to the web travel direction, the water absorbent carrier band and the fiber material web are guided by the at least one suction device, as recited in claim 25.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 25 is improper and should be withdrawn.

Claim 26:

Appellants submit that claim 26 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the at least one suction device comprises at least one of suction roller and/or a suction shoe, as recited in claim 26.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 26 is improper and should be withdrawn.

Claim 27:

Appellants submit that claim 27 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the shoe press unit comprises a shoe press roll, as recited in claim 27.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. §

102(e). Thus, Appellants submit that the rejection of dependent claim 27 is improper and should be withdrawn.

Claim 28:

Appellants submit that claim 28 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the water impermeable pressing band comprises a pressing jacket of the shoe press roll, as recited in claim 28.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 28 is improper and should be withdrawn.

Claim 29:

Appellants submit that claim 29 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the shoe press unit comprises at least one replaceable pressing shoe, as recited in claim 29.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. §



102(e). Thus, Appellants submit that the rejection of dependent claim 29 is improper and should be withdrawn.

Claim 30:

Appellants submit that claim 30 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the water absorbent carrier band comprises one of a structured felt having one of protuberances and a coarsely structured surface, as recited in claim 30.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 30 is improper and should be withdrawn.

Claim 31:

Appellants submit that claim 31 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the felt having protuberances comprises one of an imprinting fabric and an imprinting felt, as recited in claim 31.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. §

102(e). Thus, Appellants submit that the rejection of dependent claim 31 is improper and should be withdrawn.

Claim 32:

Appellants submit that claim 32 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that the disclosure and figures of EDWARDS fail to disclose the subject matter of the independent claim, along with the structured felt having a coarsely structured surface comprises one of a patterning fabric and a patterning felt, as recited in claim 32.

Accordingly, Appellants submit that the Examiner has failed to provide an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(e). Thus, Appellants submit that the rejection of dependent claim 32 is improper and should be withdrawn.

Accordingly, Appellants respectfully request that the decision of the Examiner to finally reject claims 1 – 4, 7 – 21, and 24 – 32 under 35 U.S.C. § 102(e) be reversed, and that the application be remanded to the Examiner for withdrawal of the rejection over EDWARDS and an early allowance of all claims on appeal.

**(B) The Rejection of Claims 5 and 6 Under 35 U.S.C. § 103(a) Over EDWARDS in view of LAAPOTTI (U.S. 5,043,046) is in Error, the Rejection Should be Reversed, and the Application Should be Remanded to the Examiner.**

Appellants traverse the rejection of claims 5 and 6 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of LAAPOTTI. The Examiner asserts that, while EDWARDS fails to disclose a plurality of press elements, LAAPOTTI shows such a feature. Appellants traverse the Examiner's assertions.

Appellants note that LAAPOTTI fails to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Appellants submit that LAAPOTTI fails to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason *why* one of ordinary skill in the art would have found it obvious to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972 (B.P.A.I. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from Appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). It is respectfully submitted that the courts have long held that it is impermissible to use Appellant's claimed invention as an instruction manual or "template" to piece together teachings of the prior art so that the claimed invention is purportedly rendered obvious. See *In re Fritch*, 972 R.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Accordingly, because EDWARDS expressly teaches against the Examiner's asserted modification, and LAAPOTTI provides no teaching or suggestion that this express disclosure of EDWARDS is improper or incorrect, Appellants submit that the asserted combination of EDWARDS and LAAPOTTI fails to render obvious the instant invention.

Claim 5:

Appellants submit that claim 5 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that no proper combination of EDWARDS and LAAPOTTI teaches or suggests the shoe pressing unit comprises, a plurality of press elements arranged adjacent one another cross-wise to the web travel direction, and a press shoe arranged to be pressed against the cylinder, wherein the plurality of press elements are adapted to press the press shoe against the cylinder, as recited in claim 5.

Accordingly, Appellants submit that the Examiner has failed to provide the necessary motivation or rationale to modify EDWARDS in view of LAAPOTTI to support a rejection of obviousness under 35 U.S.C. § 103(a). Thus, Appellants submit that the rejection of independent claim 5 is improper and should be withdrawn.

Claim 6:

Appellants submit that claim 6 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that no proper combination of

EDWARDS and LAAPOTTI teaches or suggests the plurality of press elements are actuatable independently of one another, as recited in claim 6.

Accordingly, Appellants submit that the Examiner has failed to provide the necessary motivation or rationale to modify EDWARDS in view of LAAPOTTI to support a rejection of obviousness under 35 U.S.C. § 103(a). Thus, Appellants submit that the rejection of independent claim 6 is improper and should be withdrawn.

Accordingly, Appellants respectfully request that the decision of the Examiner to finally reject claims 5 and 6 under 35 U.S.C. § 103(a) be reversed, and that the application be remanded to the Examiner for withdrawal of the rejection over EDWARDS in view of LAAPOTTI, and an early allowance of all claims on appeal.

**(C) The Rejection of Claims 22 and 23 Under 35 U.S.C. § 103(a) Over EDWARDS in view of Bluhm *et al.* (U.S. 5,556,511) (hereafter “BLUHM”) and Tapio *et al.* (U.S. 4,139,410) (hereafter “TAPIO”) is in Error, the Rejection Should be Reversed, and the Application Should be Remanded to the Examiner.**

Appellants traverse the rejection of claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of BLUHM and TAPIO. The Examiner asserts that, while EDWARDS fails to disclose a plurality of press nips, BLUHM and TAPIO disclose such a feature and that it would have been obvious to modify EDWARDS in view of this teaching of BLUHM and TAPIO. Appellants traverse the Examiner's assertions.

Appellants note that BLUHM and TAPIO fail to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Applicant submits that BLUHM and TAPIO fail to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason *why* one of ordinary skill in the art would have found it obvious to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972 (B.P.A.I. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from Appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). It is respectfully submitted that the courts have long held that it is impermissible to use Appellant's claimed invention as an instruction manual or "template" to piece together teachings of the prior art so that the claimed invention is purportedly rendered obvious. See *In re Fritch*, 972 R.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Accordingly, because EDWARDS expressly teaches against the Examiner's asserted modification, and BLUHM and TAPIO provide no teaching or suggestion that this express disclosure of EDWARDS is improper or incorrect, Appellants submit that

the asserted combination of EDWARDS, BLUHM, and TAPIO fails to render obvious the instant invention.

Claim 22:

Appellants submit that claim 22 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that no proper combination of EDWARDS, BLUHM, and TAPIO teaches or suggests the at least one additional press nip formed at the cylinder, as recited in claim 22.

Accordingly, Appellants submit that the Examiner has failed to provide the necessary motivation or rationale to modify EDWARDS in view of BLUHM, and TAPIO to support a rejection of obviousness under 35 U.S.C. § 103(a). Thus, Appellants submit that the rejection of independent claim 22 is improper and should be withdrawn.

Claim 23:

Appellants submit that claim 23 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that no proper combination of EDWARDS, BLUHM, and TAPIO teaches or suggests an additional shoe press unit arranged with the cylinder to form the at least one additional press nip, as recited in claim 23.

Accordingly, Appellants submit that the Examiner has failed to provide the necessary motivation or rationale to modify EDWARDS in view of BLUHM, and TAPIO to support a rejection of obviousness under 35 U.S.C. § 103(a). Thus, Appellants submit that the rejection of independent claim 23 is improper and should be withdrawn.

Accordingly, Appellants respectfully request that the decision of the Examiner to finally reject claims 22 and 23 under 35 U.S.C. § 103(a) be reversed, and that the application be remanded to the Examiner for withdrawal of the rejection over EDWARDS, BLUHM, and TAPIO, and an early allowance of all claims on appeal.

**(D) The Rejection of Claim 33 Under 35 U.S.C. § 103(a) Over EDWARDS in view of SAUER (U.S. 5,019,211) is in Error, the Rejection Should be Reversed, and the Application Should be Remanded to the Examiner.**

Appellants traverse the rejection of claim 33 under 35 U.S.C. §103(a) as being unpatentable over EDWARDS in view of SAUER. The Examiner asserts that, while EDWARDS fails to disclose a web having curled fibers, SAUER discloses that the use of such fibers is well known, such that it would have been obvious to modify EDWARDS in view of SAUER. Appellants traverse the Examiner's assertions.

Appellants note that SAUER fails to provide any teaching or suggestion for modifying EDWARDS in a manner contrary to the express disclosure of EDWARDS. That is, as EDWARDS expressly discloses that a typical press shoe should not be used as part of the apparatus, Appellants submit that SAUER fails to provide any teaching or suggestion that would have made it obvious to one ordinarily skilled in the art to modify EDWARDS to include such a press shoe.

In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the Examiner to provide a reason *why* one of ordinary skill in the art would have found it obvious to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972



(B.P.A.I. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from Appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). It is respectfully submitted that the courts have long held that it is impermissible to use Appellant's claimed invention as an instruction manual or "template" to piece together teachings of the prior art so that the claimed invention is purportedly rendered obvious. See *In re Fritch*, 972 R.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992).

Accordingly, because EDWARDS expressly teaches against the Examiner's asserted modification, and SAUER provides no teaching or suggestion that this express disclosure of EDWARDS is improper or incorrect, Applicant submits that the asserted combination of EDWARDS and SAUER fails to render obvious the instant invention.

Claim 33:

Appellants submit that claim 33 is allowable at least for the reason that it depends from allowable base claims and because it recites additional features that further define the present invention. In particular, Appellants submit that no proper combination of EDWARDS and SAUER teaches or suggests the fiber material web comprises curled fibers, as recited in claim 33.

Accordingly, Appellants submit that the Examiner has failed to provide the necessary motivation or rationale to modify EDWARDS in view of SAUER to support a rejection of obviousness under 35 U.S.C. § 103(a). Thus, Appellant submits that the rejection of independent claim 33 is improper and should be withdrawn.

Accordingly, Appellants respectfully request that the decision of the Examiner to finally reject claim 33 under 35 U.S.C. § 103(a) be reversed, and that the application be remanded to the Examiner for withdrawal of the rejection over EDWARDS and SAUER, and an early allowance of all claims on appeal.

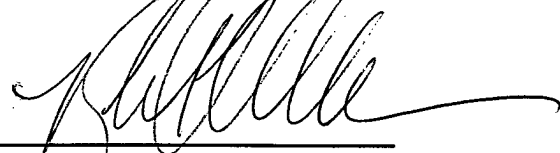
**(E) Conclusion**

- (A) Claims 1 – 4, 7 – 21 and 24 – 32 are patentable under 35 U.S.C. § 102(e) over EDWARDS;
- (B) Claims 5 and 6 are patentable under 35 U.S.C. § 103(a) over EDWARDS in view of LAAPOTTI);
- (C) Claims 22 and 23 are patentable under 35 U.S.C. § 103(a) over EDWARDS in view of BLUHM and TAPIO;
- (D) Claim 33 is patentable under 35 U.S.C. § 103(a) over EDWARDS in view of SAUER.

Specifically, the applied art of record fails to anticipate or render unpatentable the unique combination of features recited in Appellants' claims 1-33. Accordingly, Appellants respectfully request that the Board reverse the Examiner's decision to finally reject claims 1 – 4, 7 – 21 and 24 – 32 are patentable under 35 U.S.C. § 102(e), claims 5 – 6, 22 – 23 and 33 are patentable under 35 U.S.C. § 103(a), and remand the application to the Examiner for withdrawal of the rejection.

Thus, Appellants respectfully submit that each and every pending claim of the present application meets the requirements for patentability under 35 U.S.C. §102 and 35 U.S.C. § 103(a), and that the present application and each pending claim are allowable over the prior art of record.

Respectfully submitted,  
Thomas Thoroe SCHERB et al.



Neil F. Greenblum  
Reg. No. 28,394

Robert W. Mueller  
Reg. No. 35,043

October 17, 2005  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, Virginia 20191  
(703) 716-1191

Attachments: Claims Appendix  
Evidence Appendix  
Related Proceedings Appendix

**(8) CLAIMS APPENDIX*****Listing of Claims***

1. (Original) A machine for the manufacture of a fiber material web, comprising:

a shoe pressing unit;

a cylinder comprising a Yankee drying cylinder, said shoe pressing unit and said cylinder being arranged to form at least one press nip;

a water absorbent carrier band;

a water-impermeable pressing band, wherein said water absorbent carrier band and said water-impermeable pressing band are guided through said at least one press nip, and the fiber material web is adapted to pass through said at least one press nip with said water absorbent carrier band and said water-impermeable pressing band; and

said at least one press nip has a length in a web travel direction greater than approximately 80 mm,

wherein said shoe press unit, said cylinder, said water absorbent carrier band and said water-impermeable pressing band are structured and arranged so that a pressure profile which results over the press nip length has a maximum pressing pressure which is less than or equal to approximately 2 MPa, and

wherein said shoe press unit, said cylinder, said water absorbent carrier band and said water-impermeable pressing band are structured and arranged for the formation of one of a tissue paper and a hygienic paper web.

2. (Original) The machine in accordance with claim 1, wherein said press nip length is less than 200 mm.

3. (Original) The machine in accordance with claim 2, wherein said press nip length is at most 150 mm.

4. (Original) The machine in accordance with claim 1, wherein the maximum line force produced in said press nip is between approximately 90 and approximately 110 kN/m.

5. (Original) The machine in accordance with claim 1, wherein said shoe pressing unit comprises:

a plurality of press elements arranged adjacent one another cross-wise to the web travel direction;

a press shoe arranged to be pressed against said cylinder, wherein said plurality of press elements are adapted to press said press shoe against said cylinder.

6. (Original) The machine in accordance with claim 5, wherein said plurality of press elements are actuatable independently of one another.

7. (Original) The machine in accordance with claim 1, wherein the pressure profile which results over said press nip length is asymmetrical.

8. (Original) The machine in accordance with claim 1, wherein the maximum pressing pressure is exerted in a rear quarter of said press nip length with regard to the web travel direction.

9. (Original) The machine in accordance with claim 1, wherein, for a practically new carrier band, an average pressure rise gradient in a section of the pressure profile which extends from a beginning of said press nip up to the maximum pressing pressure is greater than or equal to approximately 40 kPa/mm.

10. (Original) The machine in accordance with claim 9, wherein the average pressure rise gradient in said section is greater than or equal to approximately 60 kPa/mm.

11. (Original) The machine in accordance with claim 9, wherein the average pressure rise gradient in said section is greater than or equal to approximately 120 kPa/mm.

12. (Original) The machine in accordance with claim 1, wherein, in a practically new carrier band, an average pressure drop gradient in an end region of the pressure profile is greater than or equal to approximately 300 kPa/mm.

13. (Original) The machine in accordance with claim 12, wherein the average pressure drop gradient in said end region is greater than or equal to approximately 500 kPa/mm.

14. (Original) The machine in accordance with claim 12, wherein the average pressure drop gradient in said end region is greater than or equal to approximately 800 kPa/mm.

15. (Original) The machine in accordance with claim 12, wherein the average pressure drop gradient in said end region is greater than or equal to approximately 960 kPa/mm.

16. (Original) The machine in accordance with claim 1, wherein, in said at least one press nip, said water absorbent carrier band is positioned between said water-impermeable pressing band and the fiber material web.

17. (Original) The machine in accordance with claim 16, wherein the fiber material web is adapted to contact said cylinder.

18. (Original) The machine in accordance with claim 1, wherein said water absorbent carrier band comprises a felt.



19. (Original) The machine in accordance with claim 1, wherein said water absorbent carrier band is constituted differently in a thickness direction.

20. (Original) The machine in accordance with claim 1, wherein a side of said water absorbent carrier band adapted to face the fiber material web has a finer structure than a side of said water absorbent carrier band adapted to face away from the fiber material web.

21. (Original) The machine in accordance with claim 1, wherein said water-impermeable pressing band has a surface which is at least one of smooth, grooved and blind bored.

22. (Original) The machine in accordance with claim 1, further comprising at least one additional press nip formed at said cylinder.

23. (Original) The machine in accordance with claim 22, further comprising an additional shoe press unit arranged with said cylinder to form said at least one additional press nip.

24. (Original) The machine in accordance with claim 1, further comprising an additional press nip arranged ahead of said cylinder relative to the web travel direction.

25. (Original) The machine in accordance with claim 1, further comprising at least one suction device,

wherein ahead of said cylinder, relative to the web travel direction, said water absorbent carrier band and the fiber material web are guided by said at least one suction device.

26. (Original) The machine in accordance with claim 25, wherein said at least one suction device comprises at least one of suction roller and/or a suction shoe.

27. (Original) The machine in accordance with claim 1, wherein said shoe press unit comprises a shoe press roll.

28. (Original) The machine in accordance with claim 27, wherein said water impermeable pressing band comprises a pressing jacket of said shoe press roll.

29. (Original) The machine in accordance with claim 1, wherein said shoe press unit comprises at least one replaceable pressing shoe.

30. (Original) The machine in accordance with claim 1, wherein said water absorbent carrier band comprises one of a structured felt having one of protuberances and a coarsely structured surface.

31. (Original) The machine in accordance with claim 30, wherein said felt having protuberances comprises one of an imprinting fabric and an imprinting felt.

32. (Original) The machine in accordance with claim 30, wherein said structured felt having a coarsely structured surface comprises one of a patterning fabric and a patterning felt.

33. (Original) The machine in accordance with claim 1, wherein the fiber material web comprises curled fibers.

**(9) EVIDENCE APPENDIX**

A verified English translation of German Application No. 198 60 687.7 filed December 29, 1998, which perfects Appellant's claim of priority.

**(10) RELATED PROCEEDINGS APPENDIX**

A decision on Appeal No. 2003-1161 (in parent U.S. Application No. 09/471,369) was mailed by the Board of Patent Appeals and Interferences on October 23, 2003 affirming the Examiner's final rejection.